

TECHNICAL INFORMATION REPORT (TIR) WORKSHEET

Part 1 PROJECT OWNER AND
PROJECT ENGINEER

Project Owner KING COUNTY
 Phone (206) 296-3708
 Address 201 S. JACKSON ST.
SEATTLE, WA 98104-3856
 Project Engineer JIM RHODES
 Company HNTB
 Phone (425) 455-3555

Part 2 PROJECT LOCATION AND
DESCRIPTION

Project Name SOUTH PARK
BRIDGE REPLACEMENT
 DDES Permit # _____
 Location Township 24
 Range 4 E.
 Section 32
 Site Address BRIDGE #3179
DUWAMISH RIVER

Part 3 TYPE OF PERMIT APPLICATION

- ☐ Landuse Services
 Subdivision / Short Subd. / UPD
☐ Building Services
 M/F / Commerical / SFR
☒ Clearing and Grading
☒ Right-of-Way Use
☒ Other BRIDGE REPLACEMENT

Part 4 OTHER REVIEWS AND PERMITS

- ☒ DFW HPA ☒ Shoreline
 Management
☒ COE 404 ☒ Structural
☐ DOE Dam Safety Rockery/Vault/____
☒ FEMA Floodplain ☒ ESA Section 7
☐ COE Wetlands
☒ Other SEE PERMIT LIST IN REPORT

Part 5 PLAN AND REPORT INFORMATION

Technical Information Report

Type of Drainage Review (Full) / Targeted /
 (circle): Large Site
 Date (include revision JUNE 2009
 dates): _____
 Date of Final: _____

Site Improvement Plan (Engr. Plans)

Type (circle one): (Full) / Modified /
 Small Site
 Date (include revision JUNE 2009
 dates): _____
 Date of Final: _____

Part 6 ADJUSTMENT APPROVALS

Type (circle one): Standard / Complex / Preapplication / Experimental / Blanket

Description: (include conditions in TIR Section 2)

Date of Approval: _____

TECHNICAL INFORMATION REPORT (TIR) WORKSHEET

Part 7 MONITORING REQUIREMENTS

Monitoring Required: Yes / No

Start Date: _____

Completion Date: _____

Describe: MONITOR TEST, CONTAMINATED
SOILS REMOVAL, CONTAMINATED WATER
COLLECTION/TREATMENT, PH, ETC...
POST PROJECT MAINTENANCE REQ.

Part 8 SITE COMMUNITY AND DRAINAGE BASIN

Community Plan : SOUTH PARK BRIDGE REPLACEMENTSpecial District Overlays: MATCH CITY OF SEATTLE AT S. CLOVERDALE ST.Drainage Basin: DUWAMISH RIVERStormwater Requirements: BASIC WATER QUALITY, FLOW CONTROL EXEMPT

Part 9 ONSITE AND ADJACENT SENSITIVE AREAS

☒ River/Stream DUWAMISH WATERWAY☐ Lake _____☐ Wetlands _____☐ Closed Depression _____☒ Floodplain LOCAL REGULATED FLOODWAY☒ Other DUWAMISH WATERWAY☒ Steep Slope SCOUR ANALYSIS☒ Erosion Hazard SLOPE PROTECTION☐ Landslide Hazard _____☐ Coal Mine Hazard _____☒ Seismic Hazard SEISMIC ANALYSIS☒ Habitat Protection SHORE RESTORATION☐ _____

Part 10 SOILS

| Soil Type | Slopes | Erosion Potential |
|---------------------------|----------------------|-------------------|
| <u>VASHON TILL</u> | <u>FLAT SITE</u> | <u>LITTLE</u> |
| <u>TILL RIVER BANK</u> | <u>3:1 (ARMORED)</u> | <u>REQ. ARMOR</u> |
| <u>SAND/CLAY 20' DEEP</u> | <u>NONE</u> | <u>NONE</u> |
| _____ | _____ | _____ |

☐ High Groundwater Table (within 5 feet)☐ Sole Source Aquifer☒ Other POTENTIALLY CONTAMINATED AREAS☐ Seeps/Springs☐ Additional Sheets Attached

TECHNICAL INFORMATION REPORT (TIR) WORKSHEET

Part 11 DRAINAGE DESIGN LIMITATIONS

REFERENCE

☒ Core 2 – Offsite Analysis☒ Sensitive/Critical Areas☐ SEPA☒ Other EROSION CONTROL / DRAINAGE☒ OUTFALLS MUST BE AT OR ABOVE EL. 8.64 NAVD88

LIMITATION / SITE CONSTRAINT

CONNECTIONS TO COMBINED SEWER SYSTEM REQUIREDOUTFALL DESIGN PER BA.PER BA RECOMMENDATIONS☐ Additional Sheets Attached

Part 12 TIR SUMMARY SHEET

(provide one TIR Summary Sheet per Threshold Discharge Area)

Threshold Discharge Area: SOUTH BASIN
(name or description)

Core Requirements (all 8 apply)

Discharge at Natural Location

Number of Natural Discharge Locations: 1 (DUWAMISH RIVER)

Offsite Analysis

Level: ① / 2 / 3dated: DEC 1, 2008Flow Control
(incl. facility summary sheet)Level: 1 / 2 / 3 or Exemption Number EXEMPT
Small Site BMPs

Conveyance System

Spill containment located at: RAIN GARDEN INLET
CATCH BASIN STRUCTURE

Erosion and Sediment Control

ESC Site Supervisor:

Contact Phone:

After Hours Phone:

Maintenance and Operation

Responsibility: Private / Public

If Private, Maintenance Log Required: Yes / No

Financial Guarantees and
LiabilityProvided: Yes / NoWater Quality
(include facility summary sheet)Type: Basic / Sens. Lake / Enhanced Basicm / Bog
or Exemption No. _____

Landscape Management Plan: Yes / No

Special Requirements (as applicable)

Area Specific Drainage
RequirementsType: CDA / SDO / MDP / BP / LMP / Shared Fac. None
Name: _____

Floodplain/Floodway Delineation

Type: Major / Minor / Exemption / None

100-year Base Flood Elevation (or range): EL. = 12.31Datum: NAVD 88

Flood Protection Facilities

Describe: HOWARD HANSON DAM REGULATES
FLOWSSource Control
(comm./industrial landuse)Describe landuse: BRIDGE / ROADWAYDescribe any structural controls: N/A

TECHNICAL INFORMATION REPORT (TIR) WORKSHEET

| | |
|---|---|
| Oil Control | High-use Site: Yes / <u>(No)</u> Treatment BMP: _____ Maintenance Agreement: Yes / <u>(No)</u> with whom? <u>COUNTY FORCES</u> |
| Other Drainage Structures | |
| Describe: <u>RAIN GARDENS, CATCA BASIN STRUCTURE, TAILHOUSE WEIR OUTLET, EMERGENCY OUTFALL STRUCTURE, NEW OUTFALL PIPE, RIVER OUTFALL, DOWN-TURNED ELBOWS</u> | |

| Part 13 EROSION AND SEDIMENT CONTROL REQUIREMENTS | |
|--|---|
| MINIMUM ESC REQUIREMENTS DURING CONSTRUCTION <input checked="" type="checkbox"/> Clearing Limits <input checked="" type="checkbox"/> Cover Measures <input checked="" type="checkbox"/> Perimeter Protection <input checked="" type="checkbox"/> Traffic Area Stabilization <input checked="" type="checkbox"/> Sediment Retention <input checked="" type="checkbox"/> Surface Water Control <input checked="" type="checkbox"/> Dust Control <input checked="" type="checkbox"/> Construction Sequence | MINIMUM ESC REQUIREMENTS AFTER CONSTRUCTION <input checked="" type="checkbox"/> Stabilize Exposed Surfaces <input checked="" type="checkbox"/> Remove and Restore Temporary ESC Facilities <input checked="" type="checkbox"/> Clean and Remove All Silt and Debris Ensure Operation of Permanent Facilities <input type="checkbox"/> Flag Limits of SAO and open space preservation areas <input type="checkbox"/> Other _____ |

| Part 14 STORMWATER FACILITY DESCRIPTIONS (Note: Include Facility Summary and Sketch) | | | |
|---|---|--|---|
| Flow Control | Type/Description | Water Quality | Type/Description |
| <input type="checkbox"/> Detention <input checked="" type="checkbox"/> Infiltration <input type="checkbox"/> Regional Facility <input type="checkbox"/> Shared Facility <input type="checkbox"/> Small Site BMPs <input checked="" type="checkbox"/> Other | _____ <u>RAIN GARDENS</u> _____ _____ _____ <u>FLOW CONTROL EXEMPT</u> | <input type="checkbox"/> Biofiltration <input type="checkbox"/> Wetpool <input checked="" type="checkbox"/> Media Filtration <input checked="" type="checkbox"/> Oil Control <input checked="" type="checkbox"/> Spill Control <input type="checkbox"/> Small Site BMPs <input type="checkbox"/> Other | _____ _____ <u>RAIN GARDENS</u> <u>DOWN-TURNED</u> <u>ELBOWS</u> <u>DOWN-TURNED</u> <u>ELBOWS</u> _____ _____ |

TECHNICAL INFORMATION REPORT (TIR) WORKSHEET

| Part 15 EASEMENTS/TRACTS | Part 16 STRUCTURAL ANALYSIS |
|--|---|
| <input checked="" type="checkbox"/> Drainage Easement <input checked="" type="checkbox"/> Access Easement <input type="checkbox"/> Native Growth Protection Covenant <input type="checkbox"/> Tract <input type="checkbox"/> Other | <input type="checkbox"/> Cast in Place Vault <input type="checkbox"/> Retaining Wall <input type="checkbox"/> Rockery > 4' High <input type="checkbox"/> Structural on Steep Slope <input type="checkbox"/> Other |

| Part 17 SIGNATURE OF PROFESSIONAL ENGINEER |
|--|
| <p>I, or a civil engineer under my supervision, have visited the site. Actual site conditions as observed were incorporated into this worksheet and the attached Technical Information Report. To the best of my knowledge the information provided here is accurate.</p> <p><u>James H. Rhodes</u> 10/01/2009 Signed/Date</p> |

STORMWATER FACILITY SUMMARY SHEET

DDES Permit

Number / (provide one Stormwater Facility Summary Sheet per *Natural Discharge Location*)**Overview:**

Project Name

SOUTH PARK BRIDGE REPLACEMENTDate OCT. 2009**Downstream Drainage Basins**Major Basin Name DUWAMISH RIVERImmediate Basin Name DUWAMISH RIVER**Flow Control:**Flow Control Facility Name/Number FLOW CONTROL EXEMPT

Facility

Location BOAT ACCESS ROAD RAIN GARDEN

If none,

Flow control provided in regional/shared facility (give location) N/ANo flow control required N/A Exemption number N/A**General Facility Information:**

Type/Number of detention facilities: Type/Number of infiltration facilities:

Ø pondsØ pondsØ vaultsØ tanksØ tanksØ trenches

Control Structure Location

UPSTREAM OF RAIN GARDENType of Control Structure CB W/ DOWN-TURNED ELBOW Number of Orifices/Restrictions 1

Size of Orifice/Restriction:

No. 1 NO ORIFICENo. 2 N/ANo. 3 N/ANo. 4 N/A

(ALL FLOWS GO THROUGH RAIN GARDENS)

Flow Control Performance Standard EXEMPT

Live Storage Volume $\overset{\text{TEMPORARY STORAGE}}{=} 6,837 \text{ CF}$ Depth 1.00' MAX. Volume Factor of Safety
17,190 CF $17,190 \div 6,837 = \underline{\underline{FS OF 3}}$

Number of Acres Served 2.35 ACRES

Number of Lots N/A - RIGHT OF WAY

Dam Safety Regulations (Washington State Department of Ecology)

Reservoir Volume above natural grade Ø

Depth of Reservoir above natural grade Ø

Facility Summary Sheet Sketch

All detention, infiltration and water quality facilities must include a detailed sketch.
(11"x17" reduced size plan sheets may be used)

SEE ATTACHED PLANS

Water Quality:**Type/Number of water quality facilities/BMPs:**

_____ biofiltration swale _____ sand filter (basic or large)
 _____ (regular/wet/ or continuous inflow) _____ sand filter, linear (basic or large)
 _____ combined detention/wetpond _____ sand filter vault (basic or large)
 _____ (wetpond portion basic or large) sand bed depth _____ (inches)
 _____ combined detention/wetvault _____ stormwater wetland
 _____ filter strip _____ storm filter
 _____ flow dispersion _____ wetpond (basic or large)
 _____ farm management plan _____ wetvault
 _____ landscape management plan _____ Is facility Lined?
 _____ oil/water separator If so, what marker is used
 above
 _____ (baffle or coalescing plate) 1 RAIN GARDEN
 Liner? _____ YES IS FACILITY LINED?
 _____ 1.5' SOIL MATRIX DEPTH
 _____ catch basin inserts:
 Manufacturer _____
 _____ pre-settling pond
 _____ pre-settling structure:
 Manufacturer _____
YES high flow bypass structure (e.g., flow-splitter catch basin)
YES source controls

Design Information

Water Quality design flow BOAT ACCESS ROAD
RAIN GARDEN $Q_{WR} = 0.781 \text{ CFS}$

Water Quality treated volume (sandfilter) N/A

Water Quality storage volume (wetpool) N/A

Facility Summary Sheet Sketch

STORMWATER FACILITY SUMMARY SHEET

DDES Permit

Number 2(provide one Stormwater Facility Summary Sheet per *Natural Discharge Location*)**Overview:**

Project Name

SOUTH PARK BRIDGE REPLACEMENT Date OCT. 2009**Downstream Drainage Basins**Major Basin Name DUWAMISH RIVERImmediate Basin Name DUWAMISH RIVER**Flow Control:**Flow Control Facility Name/Number FLOW CONTROL EXEMPT

Facility

Location ORR STREET RAW GARDEN

If none,

Flow control provided in regional/shared facility (give location) N/ANo flow control required N/A Exemption number N/A**General Facility Information:**

Type/Number of detention facilities: Type/Number of infiltration facilities:

0 ponds0 vaults0 tanks0 ponds0 tanks0 trenches

Control Structure Location

NO CONTROL STRUCTURE - SHEET FLOW INTO FACILITY

Type of Control Structure

N/A Number of Orifices/Restrictions N/A

Size of Orifice/Restriction:

No. 1 NO ORIFICENo. 2 N/ANo. 3 N/ANo. 4 N/AFlow Control Performance Standard EXEMPT

Live Storage Volume 540 CF Depth 1.00 FT Volume Factor of Safety
 $3,264 \div 540 \text{ CF} = \text{FS OF } 6$

Number of Acres Served 0.61 ACRES

Number of Lots IN RIGHT-OF-WAY

Dam Safety Regulations (Washington State Department of Ecology)

Reservoir Volume above natural grade \emptyset

Depth of Reservoir above natural grade \emptyset

Facility Summary Sheet Sketch

All detention, infiltration and water quality facilities must include a detailed sketch.
(11"x17" reduced size plan sheets may be used)

SEE ATTACHED DRAWINGS

Water Quality:**Type/Number of water quality facilities/BMPs:**

_____ biofiltration swale _____ sand filter (basic or large)
 (regular/wet/ or continuous inflow) _____ sand filter, linear (basic or
 large) _____ combined detention/wetpond _____ sand filter vault (basic or
 large) (wetpond portion basic or large) sand bed depth _____ (inches)
 _____ combined detention/wetvault _____ stormwater wetland
 _____ filter strip _____ storm filter
 _____ flow dispersion _____ wetpond (basic or large)
 _____ farm management plan _____ wetvault
 _____ landscape management plan _____ Is facility Lined?
 _____ oil/water separator If so, what marker is used
 above
 (baffle or coalescing plate) 1 RAIN GARDEN
 Liner? _____ YES IS FACILITY LINED?
1.5' SOIL MATRIX DEPTH
 _____ catch basin inserts:
 Manufacturer _____
 _____ pre-settling pond
 _____ pre-settling structure:
 Manufacturer _____
YES high flow bypass structure (e.g., flow-splitter catch basin)
YES source controls

Design Information

Water Quality design flow ORR ST. RAIN GARDEN $Q_{wq} = 0.072$ CFS
 Water Quality treated volume (sandfilter) N/A
 Water Quality storage volume (wetpool) N/A

Facility Summary Sheet Sketch

TECHNICAL INFORMATION REPORT (TIR) WORKSHEET

Part 1 PROJECT OWNER AND PROJECT ENGINEER

Project Owner KING COUNTY
 Phone (206) 296-3708
 Address 201 S. JACKSON ST.
SEATTLE, WA 98104-3856
 Project Engineer TIM RHODES
 Company HNTB
 Phone (425) 455-3555

Part 2 PROJECT LOCATION AND DESCRIPTION

Project Name SOUTH PARK BRIDGE REPLACEMENT
 DDES Permit # _____
 Location Township 24
 Range 4E
 Section 32
 Site Address BRIDGE # 3179
DUNAMISH RIVER

Part 3 TYPE OF PERMIT APPLICATION

- ☐ Landuse Services
 Subdivision / Short Subd. / UPD
☐ Building Services
 M/F / Commerical / SFR
☒ Clearing and Grading
☒ Right-of-Way Use
☒ Other BRIDGE REPLACEMENT

Part 4 OTHER REVIEWS AND PERMITS

- ☒ DFW HPA ☒ Shoreline Management
☒ COE 404 ☒ Structural Rockery/Vault/_____
☐ DOE Dam Safety ☒ ESA Section 7
☐ COE Wetlands
☒ Other SEE PERMIT LIST IN REPORT

Part 5 PLAN AND REPORT INFORMATION**Technical Information Report**

Type of Drainage Review (Full) / Targeted /
 (circle): Large Site
 Date (include revision OCT. 2009
 dates): _____
 Date of Final: _____

Site Improvement Plan (Engr. Plans)

Type (circle one): (Full) / Modified /
 Small Site
 Date (include revision OCT. 2009
 dates): _____
 Date of Final: _____

Part 6 ADJUSTMENT APPROVALS

Type (circle one): Standard / Complex / Preapplication / Experimental / Blanket

Description: (include conditions in TIR Section 2)

Date of Approval: _____

TECHNICAL INFORMATION REPORT (TIR) WORKSHEET

Part 7 MONITORING REQUIREMENTS

Monitoring Required: Yes / No

Start Date: _____

Completion Date: _____

Describe: MONITOR TEST, CONTAMINATED
SOILS REMOVAL, CONTAMINATED WATER
COLLECTION/TREATMENT, PH, etc...
POST PROJECT MAINTENANCE REQ.

Part 8 SITE COMMUNITY AND DRAINAGE BASIN

Community Plan: SOUTH PARK BRIDGE REPLACEMENTSpecial District Overlays: MATCH CITY OF SEATTLE AT S. CLOVERDALE ST.Drainage Basin: DUWAMISH RIVERStormwater Requirements: BASIC WATER QUALITY, FLOW CONTROL EXEMPT

Part 9 ONSITE AND ADJACENT SENSITIVE AREAS

☒ River/Stream DUWAMISH WATERWAY☐ Lake _____☐ Wetlands _____☐ Closed Depression _____☒ Floodplain LOCAL REGULATED FLOODWAY☒ Other DUWAMISH WATERWAY☒ Steep Slope SCOUR ANALYSIS☒ Erosion Hazard SLOPE PROTECTION☐ Landslide Hazard _____☐ Coal Mine Hazard _____☒ Seismic Hazard SEISMIC ANALYSIS☒ Habitat Protection SHORE RESTORATION☐ _____

Part 10 SOILS

Soil Type

Slopes

Erosion Potential

VASHON TILLFLAT SITELITTLETILL RIVER BANK3:1 (ARMORED)REQ. ARMORSAND/CLAY 20' DEEPNONENONE☐ High Groundwater Table (within 5 feet)☐ Sole Source Aquifer☒ Other POTENTIALLY CONTAMINATED AREAS☐ Seeps/Springs☐ Additional Sheets Attached

TECHNICAL INFORMATION REPORT (TIR) WORKSHEET

| Part 11 DRAINAGE DESIGN LIMITATIONS | |
|---|---|
| REFERENCE | LIMITATION / SITE CONSTRAINT |
| <input checked="" type="checkbox"/> Core 2 – Offsite Analysis | CONNECTIONS TO COMBINED SEWER SYSTEM REQUIRED |
| <input checked="" type="checkbox"/> Sensitive/Critical Areas | OUTFALL DESIGN PER BA. |
| <input type="checkbox"/> SEPA | |
| <input checked="" type="checkbox"/> Other EROSION CONTROL/DRAINAGE | PER BA RECOMENDATIONS |
| <input checked="" type="checkbox"/> OUTFALLS MUST BE AT OR ABOVE EL. 8.64 NAVD 88 | |
| <input type="checkbox"/> Additional Sheets Attached | |

| Part 12 TIR SUMMARY SHEET (provide one TIR Summary Sheet per Threshold Discharge Area) | |
|--|---|
| Threshold Discharge Area: (name or description) | NORTH BASIN |
| Core Requirements (all 8 apply) | |
| Discharge at Natural Location | Number of Natural Discharge Locations: 1 (DUWAMISH RIVER) |
| Offsite Analysis | Level: ① / 2 / 3 dated: DEC 1, 2008 |
| Flow Control (incl. facility summary sheet) | Level: 1 / 2 / 3 or Exemption Number EXEMPT |
| Conveyance System | Small Site BMPs |
| Erosion and Sediment Control | Spill containment located at: UPSTREAM OF VAULT |
| Maintenance and Operation | ESC Site Supervisor: Contact Phone: After Hours Phone: |
| Financial Guarantees and Liability | Responsibility: Private / (Public) If Private, Maintenance Log Required: Yes / No |
| Water Quality (include facility summary sheet) | Provided: Yes / (No) |
| | Type: (Basic) / Sens. Lake / Enhanced Basicm / Bog or Exemption No. _____ |
| | Landscape Management Plan: Yes / No |
| Special Requirements (as applicable) | |
| Area Specific Drainage Requirements | Type: CDA / SDO / MDP / BP / LMP / Shared Fac. / (None) Name: _____ |
| Floodplain/Floodway Delineation | Type: Major / Minor / Exemption / None 100-year Base Flood Elevation (or range): EL. = 12.31 Datum: NAVD 88 |
| Flood Protection Facilities | Describe: HOWARD HANSON DAM REGULATES FLOWS |
| Source Control (comm./industrial landuse) | Describe landuse: BRIDGE / ROADWAY Describe any structural controls: N/A |

TECHNICAL INFORMATION REPORT (TIR) WORKSHEET

| | |
|--|---|
| Oil Control | High-use Site: Yes / (No) Treatment BMP: _____ Maintenance Agreement: Yes / No with whom? _____ |
| Other Drainage Structures | |
| Describe: <u>WET VAULT, DOWN-TURNED ELBOWS (TEE'S)</u> | |

| Part 13 EROSION AND SEDIMENT CONTROL REQUIREMENTS | |
|--|---|
| MINIMUM ESC REQUIREMENTS DURING CONSTRUCTION <input checked="" type="checkbox"/> Clearing Limits <input checked="" type="checkbox"/> Cover Measures <input checked="" type="checkbox"/> Perimeter Protection <input checked="" type="checkbox"/> Traffic Area Stabilization <input checked="" type="checkbox"/> Sediment Retention <input checked="" type="checkbox"/> Surface Water Control <input checked="" type="checkbox"/> Dust Control <input checked="" type="checkbox"/> Construction Sequence | MINIMUM ESC REQUIREMENTS AFTER CONSTRUCTION <input checked="" type="checkbox"/> Stabilize Exposed Surfaces <input checked="" type="checkbox"/> Remove and Restore Temporary ESC Facilities <input checked="" type="checkbox"/> Clean and Remove All Silt and Debris Ensure Operation of Permanent Facilities <input type="checkbox"/> Flag Limits of SAO and open space preservation areas <input type="checkbox"/> Other _____ |

| Part 14 STORMWATER FACILITY DESCRIPTIONS (Note: Include Facility Summary and Sketch) | | | |
|--|--|--|--|
| Flow Control | Type/Description | Water Quality | Type/Description |
| <input type="checkbox"/> Detention <input type="checkbox"/> Infiltration <input type="checkbox"/> Regional Facility <input type="checkbox"/> Shared Facility <input type="checkbox"/> Small Site BMPs <input checked="" type="checkbox"/> Other | _____ _____ _____ _____ _____ <u>EXEMPT</u> | <input type="checkbox"/> Biofiltration <input checked="" type="checkbox"/> Wetpool <input type="checkbox"/> Media Filtration <input checked="" type="checkbox"/> Oil Control <input checked="" type="checkbox"/> Spill Control <input type="checkbox"/> Small Site BMPs <input type="checkbox"/> Other | _____ <u>VAULT</u> _____ <u>DOWN-TURNED ELBOWS</u> <u>DOWN-TURNED ELBOWS</u> _____ _____ |

TECHNICAL INFORMATION REPORT (TIR) WORKSHEET

| Part 15 EASEMENTS/TRACTS | Part 16 STRUCTURAL ANALYSIS |
|--|--|
| <input checked="" type="checkbox"/> Drainage Easement <input checked="" type="checkbox"/> Access Easement <input type="checkbox"/> Native Growth Protection Covenant <input type="checkbox"/> Tract <input type="checkbox"/> Other | <input type="checkbox"/> Cast in Place Vault <input type="checkbox"/> Retaining Wall <input type="checkbox"/> Rockery > 4' High <input type="checkbox"/> Structural on Steep Slope <input checked="" type="checkbox"/> Other <i>PRE-CAST VAULT</i> |

Part 17 SIGNATURE OF PROFESSIONAL ENGINEER

I, or a civil engineer under my supervision, have visited the site. Actual site conditions as observed were incorporated into this worksheet and the attached Technical Information Report. To the best of my knowledge the information provided here is accurate.

James E. Rhodes *10/01/2009*
Signed/Date

STORMWATER FACILITY SUMMARY SHEET

DDES Permit

Number 1(provide one Stormwater Facility Summary Sheet per *Natural Discharge Location*)**Overview:**

Project Name

SOUTH PARK BRIDGE REPLACEMENTDate JUNE 2009**Downstream Drainage Basins**Major Basin Name DUWAMISH RIVERImmediate Basin Name DUWAMISH RIVER**Flow Control:**Flow Control Facility Name/Number FLOW CONTROL EXEMPT

Facility

Location N/A

If none,

Flow control provided in regional/shared facility (give location) N/A

No flow control required _____ Exemption number _____

General Facility Information:

Type/Number of detention facilities: Type/Number of infiltration facilities:

0 ponds0 vaults0 tanks0 ponds0 tanks0 trenches

Control Structure Location

OFF-LINE VAULT ADJACENT TO NORTHWEST APPROACH SPANType of Control Structure TEE AND ORIFICE Number of Orifices/Restrictions 1

Size of Orifice/Restriction:

No. 1 2-5/8"No. 2 N/ANo. 3 N/ANo. 4 N/AFlow Control Performance Standard EXEMPT

Live Storage Volume _____ Depth _____ Volume Factor of Safety _____

Number of Acres Served 0.73 AC TARGETED PGISNumber of Lots N/A RIGHT OF WAY**Dam Safety Regulations (Washington State Department of Ecology)**Reservoir Volume above natural grade N/ADepth of Reservoir above natural grade N/A**Facility Summary Sheet Sketch**

All detention, infiltration and water quality facilities must include a detailed sketch.
(11"x17" reduced size plan sheets may be used)

SEE ATTACHED PLANS

Water Quality:**Type/Number of water quality facilities/BMPs:**

_____ biofiltration swale
 (regular/wet/ or continuous inflow)
 large) _____ sand filter (basic or large)
 _____ sand filter, linear (basic or
 large) _____ sand filter vault (basic or
 (wetpond portion basic or large) sand bed depth _____ (inches)
 _____ combined detention/wetvault _____ stormwater wetland
 _____ filter strip _____ storm filter
 _____ flow dispersion _____ wetpond (basic or large)
 _____ farm management plan _____ wetvault
 _____ landscape management plan NO Is facility Lined? SEALED
 _____ oil/water separator EXTERNALLY
 above If so, what marker is used
 (baffle or coalescing plate)
 Liner? _____

_____ catch basin inserts:
 Manufacturer _____
 _____ pre-settling pond
N/A pre-settling structure: DESIGN DOES NOT REQ. 2 CHAMBERS
 Manufacturer UTILITY VAULT (UV)
1 high flow bypass structure (e.g., flow-splitter catch basin)
YES source controls
DOWN-TURNED ELBOW

Design InformationWater Quality design flow 0.243 CFSWater Quality treated volume (sandfilter) N/AWater Quality storage volume (wetpool) 3,435 CF**Facility Summary Sheet Sketch**